

TOBACCO INDUSTRY RESEARCH COMMITTEE
350 FIFTH AVENUE NEW YORK 1, N. Y.

Application For Research Grant

/RENEWAL

Date:

April 12, 1956

1. Name of Investigator:

Dr. Caroline Bedell Thomas

2. Title:

Associate Professor of Medicine

3. Institution

& Address:

The Johns Hopkins School of Medicine
710 North Washington Street
Baltimore 5, Maryland

4. Project or Subject:

The Significance of Individual Smoking Patterns in Healthy
Young Adults

Part a. Comparison of smokers and nonsmokers in regard to 1) family history of hypertension and/or coronary artery disease; 2) physiologic characteristics; and 3) psychologic traits.

Part b. Ballistocardiographic studies of the circulatory response to smoking, with
5. Detailed analysis of differences associated with family history, physiologic and
psychologic traits.

Analysis of differences

Part a) Since the initiation of a long-term study of Possible Precursors of Hypertension and Coronary Artery Disease ten years ago, the smoking habits of over 700 Johns Hopkins medical students have been determined. Detailed family histories, measurements of blood pressure and heart rate at rest and under standardized forms of stress, eosinophil counts, blood cholesterol levels, individual Rorschach tests, and surveys of the personal background and habits have also been obtained on the same group of subjects. Follow-up studies are in progress. It is our plan to subdivide the population of subjects into groups according to amount, type and duration of smoking and to carry out a statistical analysis of whatever differences are to be found between these groups in regard to each type of information obtained in the long-term study.

Coding and tabulating of the fix pertinent data for transferral to IBM punch cards is under way. The first set of cards has just been completed and tabulation of the second set of cards is nearly ready for punching. It is estimated that the tabulation and punching of the basic data outlined in the semi-annual progress report, Part II, pages 5 and 6, will be completed by September 30, 1957, including all information obtained on the classes of 1948 through 1957, and partial information on the classes of 1958 and 1959 which will still be in medical school at that time. (Data is collected throughout the four academic years.)

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Detailed Plan of Procedure - Cont'd.

The statistical analysis of this large volume of data and writing it up for publication will take a minimum of three years after the basic tables are on hand. The first paper, which it is hoped can be completed in 1956-1957, is to be an inquiry into possible associations between family history of hypertension and/or coronary artery disease and the smoking habits of the subjects themselves, in which Mrs. Bernice Cohen and Miss Mary Burke will collaborate with the director.

Part b) Ballistocardiographic studies of individual patterns of circulatory response to cigarette smoking are to be continued along the lines described in the semiannual progress report, Part 1, pages 1-5. A part-time Fellow well-trained in physiologic experimental procedure is available for the year beginning on July 1, 1956, who can implement this work in a way which has not been possible this year with a Fellow without such research training. By adding to the numbers of subjects during the coming year and by making additional observations designed to cross-check and further illuminate our initial findings, it is thought that we shall have a much better comprehension of the meaning of individual variations in the circulatory effects of smoking.

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6. Budget Plan: October 1, 1956 - September 30, 1957

Fellow; two statistical clerks }
student assistants; director. }

Salaries
Expendable Supplies
Permanent Equipment
Overhead
Other

\$8,400
300.
000
1,924
720
\$ 11,544.

Services and rental, IBM equip- }
ment. }

Total

7. Anticipated Duration of Work: Three years.

8. Facilities and Staff Available: There is ample work space in conjunction with our major project including a separate laboratory equipped with a Starr-type ballistogardiograph and a double-channel Sanborn Viso-Cardiette.

The entire project will be under my direct supervision, and will be assisted by the secretary and the physiological technician of the long-term project where required.

9. Additional Requirements: Continuation of the advice and counsel of Miss Mary Burke, Statistician to the Tobacco Industry Research Committee.

10. Additional Information (Including relation of work to other projects and other sources of supply):

The aims of the project outlined above are in harmony with those of Grant H-1891 (C2) entitled "Precursors of Hypertension and Coronary Artery Disease" awarded by the National Heart Institute. The funds from that source do not include many of the items covered by the budget given above. Where similar items exist in each of the two budgets, it is because the budget from Grant H-1891 (C) is insufficient to meet the total expenses of a given item, and the two budgets will be used in such a way that they supplement each other.

s/s/
Signature Caroline Bedell Thomas
Director of Project

s/s/ (Associate Dean) Institution

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